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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,575	02/15/2001	Tim Cantrell	23101.0003U1	1832

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NEEDLE & ROSENBERG, P.C.  
SUITE 1000  
999 PEACHTREE STREET  
ATLANTA, GA. 30309-3915

EXAMINER

WILSON, MICHAEL C

ART UNIT	PAPER NUMBER
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1632

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/784,575

Applicant(s)

CANTRELL ET AL.

Examiner

Michael C. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 59-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 59-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9-23-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

Claims 1-58 and 66-87 have been canceled. Claims 59-65 remain pending and are under consideration in the instant office action.

Applicant's arguments filed 9-23-04 have been fully considered but they are not fully persuasive.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112 – new matter***

Claims 59-65 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The phrases "embryo that develops and hatches in the shell" (59, 64, 65), "shell that formed around a female pronucleus that developed into the embryo" (59, 64) and "shell that formed around a female pronucleus that developed into the zygote" (65) have been deleted. Claims 77-80 have been canceled.

New phrase "wherein the shell is deposited around a female pronucleus before the female pronucleus joins a male pronucleus" (claims 59, 64 and 65) is new matter. Applicants point to pg 5, lines 6-26, and pg 8, lines 1-6. Nowhere in the citations do

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applicants suggest or imply that the shell is deposited before the pronuclei join as claimed.

New phrase “the embryo develops from the joining of the female pronucleus and the male pronucleus in the shell” (claims 59, 64 and 65) is new matter. Applicants point to pg 5, lines 6-26, and pg 8, lines 1-6. Nowhere in the citations do applicants suggest or imply that the embryo develops within the shell or that the female and male pronuclei join in the shell as claimed.

***Claim Rejections - 35 USC § 112 – indefiniteness***

Claims 59-65 as newly amended are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 59, 64 and 65 are unclear because it is unclear if the claims are listing steps required to use the "oviposited egg comprising an embryo and a shell" or steps required to make the egg. If applicants are attempting to list steps required to use the product, the steps of the process are not clearly set forth, i.e. depositing a shell around the female pronucleus, joining the female and male pronucleus in the shell, developing an embryo in the shell until the embryo is hatched as a live chick. If applicants are attempting to list steps required to make the product, the steps result in a live chick, not an "oviposited egg" as claimed, and the steps are unclear.

***Claim Rejections - 35 USC § 102***

The rejection of claims 59-65 under 35 U.S.C. 102(b) as being anticipated by Johnston (1998, Poultry Science, Vol. 77, pg 142) has been withdrawn because Johnston did not teach the embryo "developed from the joining of the female pronucleus and the male pronucleus in the shell" as claimed. Johnston taught an oviposited egg comprising an embryo and a shell. The ovum was fertilized by injecting sperm into the ovum after the egg was oviposited. Therefore, the shell was deposited around the female pronucleus before the female and male pronuclei were joined as claimed. The fertilized oocyte is a zygote or embryo as claimed. The zygote is one cell, which is less than 10,000 cells as claimed. The embryo can develop in the shell and hatch as a live chick as claimed because Johnson taught the embryo showed signs of cellular proliferation (last sentence). However, Johnston did not teach whether the embryo

developed from the joining of the female pronucleus and the male pronucleus in the shell as claimed or outside of the shell after removing the ovum from the oviposited egg.

The rejection of claims 66-77 under 35 U.S.C. 102(b) as being anticipated by Naito (1990, J. Exp. Zoo., Vol. 254, pg 322-326) as supported by Olsen (J. Morph., 1942, Vol. 70, pg 513-533, Ref DC in the IDS filed 9-4-01) has been withdrawn because the claims have been canceled.

### ***Claim Rejections - 35 USC § 103***

Claims 59-65 as amended are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston (1998, Poultry Science, Vol. 77, pg 142) in view of Goldberg (1992, Ped. Research, Vol. 32, pg 23-26) for reasons of record.

Johnston taught an oviposited egg comprising an embryo and a shell. Sperm was injected into the ovum after the egg was oviposited. Therefore, the shell was deposited around the female pronucleus before the female and male pronuclei were joined as claimed. The fertilized oocyte is a zygote or embryo as claimed. The zygote is one cell, which is less than 10,000 cells as claimed. The embryo can develop in the shell and hatch as a live chick as claimed because Johnson taught the embryo showed signs of cellular proliferation (last sentence). Johnston did not teach the embryo developed from the joining of the female pronucleus and the male pronucleus in the shell as claimed.

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However, Goldberg taught making a 1 mm window in avian eggs having embryos to inject various solutions (§ bridging pg 23-24).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to inject sperm into a an oviposited avian egg having less than 10,000 cells as taught by Johnston by making a 1 mm window in the egg as taught by Goldberg. This would have resulted in the joining of the male and female pronuclei in the shell as claimed. One of ordinary skill in the art at the time of the invention would have been motivated to inject sperm into the ovum while the ovum was in the shell using a 1 mm window to decrease the amount of change to the embryo and to maintain the integrity of the egg. One of ordinary skill in the art at the time of the invention would have been motivated to use the eggs of Johnston in teratogenic studies to determine if manipulating eggs as taught by Johnston effect teratogenesis.

Applicants argue Johnston taught the ovum was removed from its shell prior to fertilization. Applicants' argument is not persuasive. Johnston does not teach the ovum was removed from the shell prior to fertilization. Moreover, the combined teachings of Johnston and Goldberg do not require removal of the ovum from its shell.

The egg taught by Johnston is capable of hatching ("can develop in the shell and hatch") which is all that is required in the claims. Applicants point to pg 10, line 15, through pg 11, line 24, which merely suggest incubating the egg until hatch.

### ***Conclusion***

No claim is allowed.

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Inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wilson who can normally be reached at the office on Monday, Tuesday, Thursday and Friday from 9:30 am to 6:00 pm at 571-272-0738.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on 571-272-0804.

The official fax number for this Group is (703) 872-9306.

Michael C. Wilson



MICHAEL WILSON  
PRIMARY EXAMINER